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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/713,937	11/14/2003	Phillip Michael Cook	80048	4805
7590	01/06/2006			
Jonathan D. Wood Eastman Chemical Company P.O. Box 511 Kingsport, TN 37662-5075			EXAMINER PRATT, HELEN F	
			ART UNIT 1761	PAPER NUMBER

DATE MAILED: 01/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/713,937	Applicant(s) COOK ET AL.	
	Examiner Helen F. Pratt	Art Unit 1761	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 19-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 19-22 are indefinite in that there is no antecedent basis for the term "emulsion" of claim 10. Nothing is seen in claim 1 from which claim 10 depends that an emulsion is formed.

Information Disclosure Statement

Applicants IDS of 6-27-05 has been considered. This "interaction" is seen to have been in the nature of development of products and research and is not considered prior art, since the communication was not published.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1- 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kupper et al. (4,705,691) or Hasegawa (JP 3452713B2) in view of Ikawa et al. (52 1977-24535) and Merkt et al. 2002/0034575.

Kupper et al. disclose as in claim 1 a beverage opacifier containing a saturated fat (clouding agent), and one or more weighting agents (abstract). The weighting agent, sucrose acetate isobutyrate (SAIB) can be in the amount of from 1-20% and the clouding agent, which is considered to be the substrate, can be used in amounts of from 0.1 to 25%, and from 1-30% emulsifier and water from 25 to 97.9% (col. 5, lines 20-25). The product can be spray dried making the composition a solid. Also the clouding agent can be glyceryl tri-caprylate/caprate (col. 9, lines 42-45). The emulsifiers are also considered to be the substrate as they are the same as those cited as substrates as in claim 8. Also, Hasegawa discloses that a dried emulsion can be made using trehalose (substrate and gum Arabic and SAIB). Ikawa et al. disclose (52 1977-24535) that it is known to make a carotenoid preparation using 9.5 oil, two parts bixen and 5 parts SAIB, 4 parts cocoa oil and 0.5 parts sorbitan trioleate. Here the SAIB is present in amounts of about 45% (page 4, ex. 2). The formulation is considered to be solid as the composition has been shown. Merkt et al. '575 discloses the use of SAIB and fat (a support) and emulsifiers such as gums (a support) (abstract and 0013, 0014, 0020, 0021, 0023, 0034, 0036). Claim 1 differs from the reference in that the formulation is pourable in less than 20 seconds according to a particular method. The composition, is assumed to be solid, as in claim 1, and it is assumed that the word, pourable, does not mean that the composition is liquid (specification). However, as the composition has been shown in the claimed amounts, the composition is seen as being pourable in less than 20 seconds.

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Claims 2-4 further require that the SAIB is present in particular amounts from 30-70%. However, as the composition is dried as in Kupper et al. and Hasekawa, the amounts would have to be higher as claimed. Also, the secondary references disclose SAIB's within the claimed amounts. Therefore, it would have been obvious to make a composition with higher amounts of SAIB's.

Claim 5 further requires that the substrate is about 40-60% by weight. Such amounts are disclosed by the above references since the SAIB is of a lesser amount. Therefore, it would have been obvious to use the substrate in the claimed amounts.

Claims 6 and 7 further require that the formulation is pourable in 10 seconds and 5 seconds. However, as the claimed composition has been disclosed in combination, it would have been pourable in those particular times. Therefore, it would have been obvious to make the product pourable at within the claimed times.

Substrates as in claim 8 have been disclosed above and are obvious for those reasons.

Processing aids such as emulsifiers as in claim 9 and 10 are disclosed by Merkt et al. (0023). Hasegawa disclose the use of middle chain fatty acid's (MCT's) as processing aids (also claim 12), which are disclosed by the specification on page 10, line 26). Therefore, it would have been obvious to use known processing aids and emulsifiers in the claimed composition.

Claims 11 and 13, 14 further require particular emulsifiers. Hasegawa disclose the use of gum Arabic (acacia). Kupper et al. disclose the use of gums, particularly

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acacia (Arabic) modified food starch and carboxymethylcellulose. The reference does not say that they cannot be used in combination. Therefore, it would have been obvious to use gum acacia with starch, or acacia only as emulsifiers as shown by the references.

Claim 15 further requires particular amounts of ingredients. Kuppers discloses the use of 1-20% of a weighting agent (SAIB) and 25-97% water, and 1-30% of an emulsifier (col. 9, lines 58-64, col. 10, lines 1, 17-22). Therefore, it would have been obvious to use the known ingredients in known amounts.

Clouding agents are disclosed as amounts from 0.1 to 25 % as in claim 16, and that it is a triglyceride fat as in claim 17 and that the clouding agent can also be glyceryl tri-caprylate/caprate as in claim 18 (col. 1, lines 48-64, col. 10, lines 14-17). Therefore, it would have been obvious to use known clouding agents as disclosed by Kuppers et al. to make the claimed composition.

Claims 19-23 further require particular amounts of the formulation. However, it is seen that it would have been within the skill of the ordinary worker to use particular amounts of a known beverage opacifier depending on the amounts of other ingredients in the composition. Claims 19 and 20, 21, 22 further require different types of beverages using the "emulsion" of claim 10. However, claim 10 requires an emulsifier, and claim 10 depends on claim 1 which is not seen to be an emulsion. Kupper discloses using 1-75 of an emulsion containing the claimed ingredients, and the claimed amount in a beverage syrup and in a carbonated beverage (col. 9, lines 58-66 and col.

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10, lines 35-44). Therefore, it would have been obvious to use known amounts of the claimed ingredients in a composition.

Claim 23 further requires the use of a particular amount of dry beverage pre-mix containing SAIB of claim 1. Kupperts discloses that the composition can be spray dried (col. 10, lines 60, 61, col. 9, lines 58-63). The opacifier is seen to have been a premix because it contains the claimed ingredients. Therefore, it would have been obvious to make the composition as claimed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Helen F. Pratt whose telephone number is 571-272-1404. The examiner can normally be reached on Monday to Friday from 9:30 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Milton Cano, can be reached on 571-272-1398. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hp 1-2-2006


HELEN PRATT
PRIMARY EXAMINER